

Amendments to the Specification

Please delete the paragraph 12 (lines 29 and 30) on page 5 in its entirety.

Please replace the second full paragraph on page 45 with the following rewritten paragraph:

The levels of FPA in the concentrated samples were determined by an EIA technique. Immobilon AV membranes were wetted in imidazole buffer for 10 minutes and dried for 60-90 minutes at room temperature. FPA standards ranging from 0.2-0.125 mg/ml and assay supernatant fluids were applied as 1 µl spots onto a pre-wetted Immobilon AV membrane for the purpose of covalent immobilization. Smaller peptides such as FPA (MW 1,800) are kinetically favored for immobilization over larger peptides or milk proteins with molecular weights in excess of 10,000. The spots were allowed to dry at room temperature and the membrane was blocked with 0.5 % casein for 2 hours at the same temperature. Covalently bound FPA was detected with a sandwich of rabbit anti-FPA and anti-rabbit/HRP conjugate antibodies. Bound chromophore was detected with metal enhanced DAB substrate. The spots were scanned on a Shimadzu Densitometer at 270 nm. ~~The results are shown in Figure 12.~~ **The results are summarized in Table 8.**

Please replace the third full paragraph on page 45, which continues on page 46, with the following rewritten paragraph:

~~Lanes 1-6 of Figure 12 show applications of FPA standards on membranes ranging from 200-6.25 ngs. Lane 7 shows 1 µl application of transgenic whey (pellet 2) before the addition of thrombin, and lane 8 shows the supernatant fluid from transgenic whey (pellet 2). Lane 9 shows 1 µl application of nontransgenic (NTG) whey (pellet 2) before the addition of thrombin, and lane 10 shows the supernatant fluid from NTG (pellet 2). Lane 11 shows 1 µl application of the hFIB reference protein before the addition of thrombin, and lane 12 shows the supernatant fluid from the hFIB reference protein. Lane 13 shows a 1 µl application of mouse plasma (putative fraction from pellet 2) before the addition of thrombin, and lane 14 shows supernatant from mouse plasma.~~ **FPA standards ranging from 200-6.25 ngs were applied to enzyme immunoassay (EIA) membranes for reference signal curves. Transgenic whey derivatives that had been selectively enriched for recombinant human fibrinogen by precipitation, were similarly applied and analyzed for the release of FPA before and after human thrombin treatment for 24 hours. Analogously prepared and then thrombin treated, non-transgenic whey derivatives were also compared in the same**

EIA assay. These results are summarized in Table 8 entitled “Thrombin treatment of Fibrinogen Samples”.

Please replace the second full paragraph on page 46 with the following rewritten paragraph:

~~hFIB in assay buffer when treated with thrombin released FPA as detected by a signal at 270 nm.~~ The yield of FPA from hFIB in assay buffer treated with thrombin was $100 \pm 10\%$ based on three independent trials (Table 8). No detectable amount of FPA was released from control whey (pellet-2) treated with thrombin. 1,000 ng of mouse FIB from mouse plasma (equivalent to 25 ngs of FIB cross reactive signal) gave a FPA yield of 5%. Transgenic whey (pellet-2) and hFIB spiked control whey (pellet-2) when treated with thrombin released FPA in the supernatant fluid, and no residual rhFIB or hFIB was detected in the supernatant fluid by ELISA. The yield based on the amount of FPA released from TG whey (pellet-2) and hFIB spiked control whey (pellet-2) is estimated to be $60 \pm 8\%$ and $75 \pm 9\%$ respectively based on three independent trials. A 1/1 molar ratio of FPA to fibrinogen is assumed in the calculation.